

Organic food in food policy and in public catering: lessons learned from Finland

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Abstract The strategic goal of the Finnish food policy is to develop agriculture and food production as a sector of strong expansion. Since 2010, the role of organic food is specifically stressed in strivings to improve the competitiveness of the Finnish food sector.

Recognising the significance of the statutory public catering in Finland, the focus here is the organic food in the context of public catering. The article examines the discourse articulated in food policy documents, the use of organic food within municipal food services and the materialised efforts to increase its use. Finnish experiences are discussed by considering the competitive tendering process constrained by regulations on public procurement and the role of the public catering services for the SMEs in the heavily competitive food markets. The aim is to improve actors' knowledge regarding the possibilities of the institutional consumers to increase the use of organic food. Despite the good intentions articulated in the policy documents, expanding the use of organic food in institutional kitchens is a slow process. It requires that the bottlenecks are identified and opened in the real-life context. Increased organic consumption in public catering is primarily a political decision. Its adoption requires determined will, and the local

policymakers are in a key position to decide, whether organic food should be favoured. This requires strategic decisions and a strong commitment to long-term development work. The options for including and/or increasing organic food in public catering should be considered when formulating comprehensive municipal development strategies. It is important to pay attention to the research results, to involve practical actors and to appreciate the caterers' expertise as well as the customers' experiences regarding the various quality aspects. Municipal customers are important for the SME:s, who often have difficulties to get foothold in the heavily competitive food markets. Long-term contracts provide secure income and the entrepreneurs can then better concentrate on developing their core business. To establish the customership, both the entrepreneurs and the municipal purchasers need thorough knowledge on the purchasing procedure.

Keywords Organic food · Food policy goals · Institutional kitchens · Public procurement · Most economically advantageous tender (MEAT) · SMEs

Introduction

Among the Nordic countries, Finland was for several years lagging behind Denmark and Sweden with respect to organic production and consumption (Løes et al. 2015). However, during the last few years, a much more ambitious goal has been set by Finnish authorities, utilising organic food and agriculture as a means to

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achieve a more sustainable development (ME 2009; Finnish Government 2010). The strategic goal of the Finnish food policy in general is to develop agriculture and food production as a sector of strong expansion, both for domestic markets and for export. Organic food is specifically brought up as one of the focii in strivings to improve the domestic strengths of the food sector (Finnish Government 2010, 2011). Encouraged by the Country Brand Working Group, which declared a vision of organic production contributing at least 50 % to the Finnish food sector by the year 2030, a significant growth of organic food and agriculture is expected (Country Brand Delegation 2010). Organic growth will be accomplished by diversifying and increasing organic production to meet the demand, to develop the organic food chain, and to improve the processing of organic food. The high importance of public food serving in Finland, e.g. daily school meals paid by the public, will be utilised as a driver for increasing consumption of organic and local food, understood as produced “nearby” (Finnish Government 2011).

In the EU, organic production is seen as public good, which supports sustainable development. The benefits are an environmentally benign production, securing the biodiversity and rural development through versatile entrepreneurship comprising not only food production but also recreation, tourism and environmental management services. The IFOAM principles of organic production are in line with the agricultural policy and rural development programs of the EU (Luttikholt 2007), and in the Common Agricultural Policy (CAP) of the EU, organic farming is seen as a specialised type of production that the EU is encouraging, to strengthen the bargaining position of farmers vis-à-vis other players in the food chain (EC 2014). It provides for consumers a clear alternative, not least because the production is controlled and certified to secure environmental and human wellbeing.

The interest in food supplies that constitute an alternative to industrialised and globalised food items has brought about changes in agricultural, environmental and food policies. There is increasing interest in local and organic food and in short supply chains among NGO:s (e.g. FfS 2015; Garden Organic 2015) as well as within public procurement (MacLeod and Scott 2007). The European Commission has collected practical examples on Green Public Procurement, where organic food is in several cases utilised as a means for sustainable development. These examples illustrate successful implementations of green tenders within the catering sector and provide guidance for others

(Foodlinks 2013; EC 2015). The organic food initiatives across Europe and the USA feature especially school food programs focusing on organic food as part of overall sustainability strivings (Morgan and Sonnino 2008). Other institutional consumers providing food services comprise day care centres and social and health care. The proponents stress the health and nutritional value of high-quality organic food (Sonnino 2009; He and Mikkelsen 2014), re-localised food production and consumption relying in local partnership and community awareness (Risku-Norja 2015; Tikkanen 2014), environmental benefits (Rojas et al. 2011), as well as the possibility to utilise organic principles in food education (Roos and Mikkola 2010; Risku-Norja and Mikkola 2014). When the food services are publicly funded, the food purchases are constrained by law on public procurement and careful design of tenders is required, if organic and local food suppliers will have a chance to be chosen. The aim is to secure equal opportunities for the suppliers, and the law presumes that tender calls are put out for competitive bidding (EU 2014). Commonly, quality measures have to be emphasised in addition to price, to allow for procurement of organic and local food (Løes and Nölting 2011). This is especially true, if “local organic” is stressed, because “organic” as such is an acceptable criterion.

Compared with European standards, the role of the statutory public catering is exceptionally important in Finland. A major part of the public catering services is allocated to school food. This is because—like in Sweden—a free warm meal is served daily for all pupils in primary and secondary general and vocational schools and for children in day care centres. The yearly expenditure on food served in schools, hospitals, children’s day care centres, and municipal and state offices and agencies is about 350 million Euros. Food served in schools and day care centres comprises about 80 % of the total amount of meals served (EkoCentria 2015a). About one third of the population uses the public catering service on weekdays, and all Finnish citizens are within its reach at some point of their lives. Statutory food services provide over half of all meals eaten outside home, and the great majority, 83 %, is at the response of the municipalities and the state. As a purchaser of large quantities of food, public catering is an important actor within the Finnish food sector. The government also stresses the significance of public catering as a path-breaker and as a good example in sustainable food purchases and in increasing the use of

local and organic food (Finnish Government 2010, 2011). This focus has increased the attention towards statutory food services. In the media, there are lively discussions on the topic, and several research and development projects aiming at catering for sustainability have been initiated in the past 5 years.

The present paper examines to what extent public catering in Finland has so far adopted the path-breaker role in the use of organic food. The focus is the Finnish food policy in the context of public catering. The paper starts out by examining the policy discourse as articulated in relevant national policy documents, in order to capture the goals, justification and proposed measures regarding organic food. The materialised efforts to promote organic food in public catering are then illustrated with two examples; one training program for professional caterers and one small municipality with a strategy of high consumption of local and organic food in public catering. The present status of organic food in the statutory municipal catering services is then described, along with caterer's experiences, to allow for an assessment of the implementation of the public policy goals. The lessons learned from Finland are finally discussed by considering on the one hand the competitive bidding procedures, where public policy targets are challenged by EU regulations on public procurement and, on the other hand, the role of the public catering for the survival of small- and medium-sized enterprises (SMEs) in heavily competitive food markets. The aim of the paper is to describe how Finnish food policy has supported the development of organic consumption in a framework where public food serving has a remarkably important role and how an increased organic consumption is still hampered by factors such as economical constraints and market development. We conclude by some key messages to state what can be learned from the Finnish experience.

Materials and methods

The public policy aims for the organic sector were captured by analysing relevant policy documents from 2002 and onwards. These comprised the program of the 2011–2015 government, report to parliament, decisions-in-principles as well as national strategies, promotion programs and two disquisitions (Table 1). The documents were studied using the method of qualitative content analysis, which means decomposition,

classification, compression and interpretation of the documents' subject matter in relation to the research goal (Mayring 2000). In this case, we searched for quotations dealing specifically with organic food and public catering. The quotations were identified as dealing with problems, justification, aims, measures and impacts. Central quotations were merged in the “Results” section to describe the importance of political efforts for the development of Finnish organic production and consumption.

Practical measures of implementing the policy goals are illustrated with two examples, the *Steps to Organic* training program (EkoCentria 2015b) and the case of the Kiuruvesi municipal catering (Risku-Norja 2015; Tikkanen 2014).

Data on the use of organic food within the statutory municipal catering services are fragmentary, and comparable time series data are not available. To assess the current status of organic consumption in public catering in Finland, data were obtained from (1) a postal survey carried out in 2005 targeted to day care centres committed to the Steps to Organic training program (Muukka 2008), (2) a telephone survey carried out in 2007 directed to municipal catering managers to clarify use of local and organic food within statutory public catering (Muukka et al. 2009), (3) an Internet questionnaire directed to responsible actors within municipal catering services carried out in 2009 with a broad focus on catering for sustainability (Risku-Norja and Mikkola 2014), and (4) an advocacy group of the organic sector (Pro Luomu 2015b).

EU regulations on public procurement (EU 2014) were used as a point of reference when discussing the competitive bidding process and the possibilities to increase the use of organic food within public catering.

Results

Policy discourse on organic food and public catering in Finland 2006–2015

In Finland, the expansion of organic production was rapid during the 1990s, especially after the entry of the country to EU in 1995: the share of organic cultivation increased from practically nil in 1990 to about 7 % by the beginning of the new millennium. Inspired by this, the goal by 2010 for organic production was set to 15 % of the cultivated area (MAF 2002). This goal was not

Table 1 List of the documents used in the policy discourse analysis

Reference	Document type	Focus of the document
Finnish Government 2009	Government decision-in-principle	Public procurement
Finnish Government 2010	Government report to parliament	Food policy
Finnish Government 2011	Government program	Overall policy frame
Finnish Government 2013	Government decision-in-principle	Public procurement
MAF 2002 (Ministry of Agriculture and Forestry)	National strategy	Natural resource use
Organic Strategy Work Group, OSWG 2006	National strategy	Organic sector
Food Strategy 2010	National strategy	Food policy, research
Tahvonen 2010	Disquisition	Research needs
MAF 2010 (Ministry of Agriculture and Forestry)	Disquisition	Background for food policy
Food Culture 2008	Promotion program	Food chain actors and stakeholders
ME 2009 (Ministry of the Environment)	Promotion program	Public procurement
ME 2012 (Ministry of the Environment)	Promotion program	Production and consumption
Kottila 2011	Promotion program	Organic sector
MAF 2014 (Ministry of Agriculture and Forestry)	Action plan	Organic sector
Pro Luomu 2015a	Promotion program	Organic sector

reached, the interest slightly declined and the proportion remained for several years stable at about 6 %. Since 2008, however, the certified organic area has again started to increase and it was 9.4 % in January (Pro Luomu 2015b).

A working group with representatives from ministries, extension service, higher education, food industry and retail as well as from organic food associations outlined a strategy for the organic sector in 2006, stressing customer orientation, efficient collaboration, learning and innovation, and the importance of a clear profile. Research and development was encouraged for new innovations and in order to upgrade organic production and to streamline supply and demand. Specific goals for 2007–2015 were defined as follows: organic products should comprise 6 % of domestic retail and 10 % of Finnish food exports, organic products should be used in all professional public and private kitchens, and there should be an annual increase of 15 % in the number of kitchens using organic products (OSWG 2006).

In order to boost the development, the 2006 strategy was followed up with a program to support growth and development of the organic sector by organic proponents. The program emphasised the co-linearity of the actions of all stakeholders, the authorities and decision-makers, research, extension and education, interest organisations as well as organic sector stakeholders

(Kottila 2011). However, the specific goals were still too optimistic: By 2015, both the organic production and the organic consumption have reached about two thirds of the initial goals set in the 2006 strategy. The organic part of domestic retail is 1.7 %, in public catering organic products comprise 5 % (by weight) and the proportion of organic food exports is about 1 % (Pro Luomu 2015b).

In the studied documents, organic food is justified as a means to promote overall sustainability within the public sector (ME 2009). The institutional kitchens of the public sector are obliged to act as path-breakers and as good examples in environmentally responsible food purchases and in increasing the use of local and organic food (ME 2012; Food Culture 2008). It is recognised that assessing sustainability of the food products is not unambiguous; sustainable meal service has, however, been defined: it is “a product of the shortest possible supply chain or an organic product or a product that has been produced traceably in line with the responsibility principles”. Thus, local, organic, seasonal and vegetarian are presented as options to promote sustainability (ME 2009). The specific goal for the public sector was defined that by 2010, 5 % (one meal per month) and by 2015, 15 % (one meal per week) of the meals provided by the public catering units should be based on local, organic, vegetarian or seasonal raw materials (ME 2009; Finnish Government 2009). The goal was rather

cautious, but it was a clear indication of accepting organic food and agriculture as a means towards sustainability.

With the recent introduction of a more comprehensive food policy, and paying attention to the strategy for organic markets, the Finnish government has defined new goals also for the organic sector. The current national food policy aims at increasing organic production and diversifying the choice of products to meet the demand, at developing the organic food chain as well as at improving the degree of raw material processing (Finnish Government 2010; 2011, 2013; Food strategy 2010; ME 2012; Tahvonon 2010).

The 2014 action plan (MAF 2014) updates the first organic development strategy (OSWG 2006) and the goals of the public procurement program (ME 2009) by extending the time perspective from 2015 to 2020. Domesticity is stressed both in supply and in use of organic products. The action plan is in line with the recommendations of the sustainable consumption and production program (ME 2012). Attention is paid especially to organic animal husbandry and to public procurement, where organic products should be used by all kitchens within the public sector. The choice of organic products should be increased, and efficiency in processing, marketing and export of Finnish organic food items and niche products improved. The numeric goal is expressed as 20/20/20 so that by 2020, organic production and consumption should comprise 20 % of the cultivated area and 20 % of the food in public catering. The program identifies both the measures to reach the goals and the ministries responsible for their realisation (MAF 2014). The updated development program of the organic sector also extends to the year 2020. It is in line with the government's action plan, but focuses on the measures executed by the actors of the sector (Pro Luomu 2015a).

The proposed indicators to assess the realisation of the government's action plan include cultivated area (under organic production), number or proportion of organic farms and cultivated area, number of farms with organic animal husbandry, area of organic horticulture, area of organic protein feed, part of domestic retail, volume of organic production in domestic sales, choice of organic food items in number or as percentage, proportion of domestic organic food products in retail and catering, use of organic products in the kitchens of the public sector, and proportion of organic food exports.

In the policy documents, several factors hampering the use of organic, and local, food and making the responsible choices unduly difficult in public catering have been identified. These factors deal with strategic decision-making, inadequate know-how on purchasing procedures, lack of education among the municipal procurers as well as the economically stressed purchasing procedure focusing primarily on price (Finnish Government 2010). Along with steadily increasing purchasing costs, the most severe practical problems regarding the use of organic (and local) food in institutional kitchens are the uneven availability and low availability of appropriate processed products, in volumes and qualities adapted to catering (ME 2009; Finnish Government 2009; MAF 2014). In addition, the co-operation along the organic food chain is not satisfactory, and the sector is generally fragmented (Food Culture 2008; Finnish Government 2010; Kottila and Rönni 2010).

The measures aim at settling the legislative, informative and practical hindrances for increased use of organic food and at securing decent resources both for food purchasing and for training of actors (Finnish Government 2010; MAF 2014). Communication campaigns, certification schemes and clear criteria for sustainable food procurements are offered as means to improve actors' awareness on environmental and health impacts of food. The need to clarify procurement law by providing instructions regarding promotion of seasonal, vegetarian and organic food is acknowledged as well as providing the kitchens with guidance in designing tender calls with request for traceability, freshness, nutritional quality and the "combined affordability" or most economically advantageous tender, "MEAT" (Association of Colleges 2015). Improved purchasing know-how within the public catering sector, inclusion of qualitative criteria in tender calls and developing the legislation are also considered to strengthen the competitive position of Finnish SMEs (ME 2009, 2012).

Other proposed measures deal with the operational pre-conditions, more efficient organisation and mutual co-operation among the SMEs along the whole food chain. In order to secure continuous supply of versatile products and to overcome the logistic problems, the emergence of joint marketing organisations shared by the organic producers is encouraged. The need for research and development is also pointed out, because a better match between supply and demand necessitates innovations, e.g. to develop a small-scale food

processing technology. This also contributes to diversifying and increasing the choice of organic food items (Food Culture 2008; Tahvonen 2010; Finnish Government 2010; MAF 2014; Pro Luomu 2015a).

Promoting the use of organic food in practice

Steps to Organic training program

The Steps to Organic training program is a voluntary program aimed at helping professional kitchens to increase their use of organic products as a means to support sustainable development within the catering sector. Increased demand for organic products is expected over time to improve the supply (EkoCentria 2015b). The program is a typical promotion program with strong political support. It started as a common initiative of Finfood Luomu, Finnish Food Safety Authority Evira and Finnish Organic Catering Center as a response to the growing demand anticipated in the late 1990s. The program was launched in 2002, and it has been funded from the start by the Ministry of Agriculture and Forestry. Since 2015, the costs are covered by a fee collected from the participating kitchens (EkoCentria 2015b).

The program is voluntary and currently comprises six steps allowing the kitchens to develop own operations according to the availability of organic products and to the customers' expectations. In the first step, the kitchen regularly uses at least one organic product. In the second step at least two, in the third at least four, in the fourth at least eight and in the fifth at least 20 certified organic products are in regular use in the kitchen. In steps one to

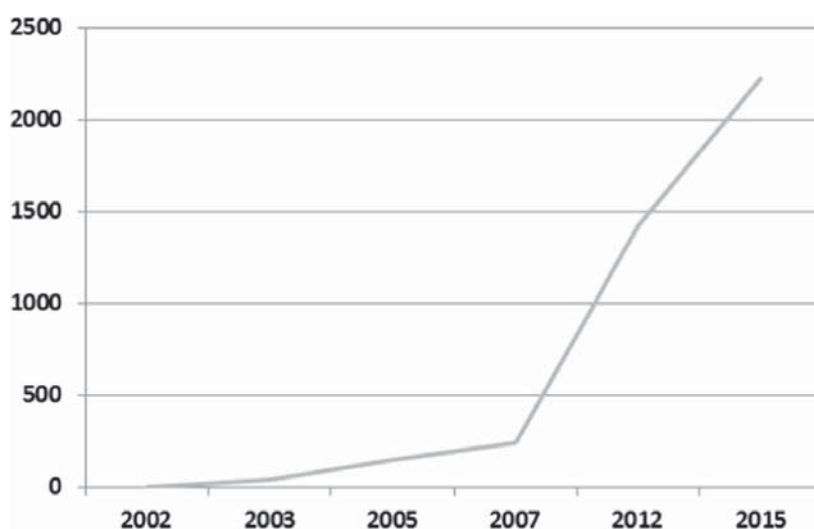
five, additional organic products are used when possible. In the sixth step—the star step—the kitchens use a substantial variety of organic products from all raw material groups. Conventional products are used only when no organic alternative is available.

In order to improve the match of the program with the needs of the kitchens, the program has been developed in a participatory process in which the caterers have been involved as experts by experience. Compared to 2002, the program has become more closely integrated with the sustainability principles, the number of steps has increased from three to six, and on-line access to the Steps to Organic materials and registration is provided. This offers the kitchens the opportunity to progress at their own speed and to join the program at any one of the six steps (EkoCentria 2015b).

Thirty-nine professional kitchens joined the Steps to Organic program in January 2003. Around 240 kitchens belonged to the program in September 2007. After the revision in 2010, the number of kitchens joining the program has increased rapidly and it is now over 2280 (Fig. 1), out of which over 80 % are municipal kitchens.

The participatory approach of the program and the benefits of planning and training, together with public discussion and the policy recommendations on the use of organic products within the public sector, have contributed to the success of the Steps to Organic program. With a total number of 22 642 professional kitchens including 8733 public sector kitchens, Steps to Organic kitchens now comprise 8 % of all professional kitchens and 20 % of public sector kitchens. About 50 % of the Steps to Organic kitchens are in schools and in day care centers, 20 % are

Fig. 1 Development of the number of kitchens participating the *Steps to Organic* training program during the existence of the program in 2002–2015



in hospitals and nursing homes, 20 % in staff restaurant kitchens and the rest in the private sector. Twenty percent of the participating kitchens are following steps one to four, 6 % have reached the fifth step and 7 % (18 kitchens) the star step (EkoCentria 2015b). The Steps to Organic program is well known among the caterers (Muukka 2008), and the kitchens committed to the program are situated all over the country.

The Kiuruvesi municipal catering

The Kiuruvesi municipality has determinedly developed the use of local and organic food (LOF) since the 1990s and is a pioneer in this sector in Finland and even internationally (Risku-Norja 2015; Tikkanen 2014). The commitment to local and organic food is articulated in the municipal strategy as follows: “Local and organic food and local food production and processing, the marketing of the products and encouraging the entrepreneurs is one of the foci of the municipal development”. According to the strategy, the proportion of local and organic products shall be increased gradually in order to make sure that local producers are able to accommodate their supply to the needs of the municipal catering.

The strategy was adopted to enhance the attractiveness of the municipality, which is located in a fairly remote area and has faced a declining population over several decades. Emphasising ecology, ethics and sustainable development in life style and in economic activity, Kiuruvesi has profiled itself as the capital of ecological Finland (Risku-Norja 2015). Securing local and organic food in municipal catering is an important ingredient of this image, which is founded on the rich regional production structure of agriculture in Kiuruvesi, and on the commitment of the municipal authorities to the concept. The local and organic food strategy is based on the territorial approach. It means reliance on local resources and on genuinely short supply chains, i.e. production, processing and consumption are geographically close to each other (Renting et al. 2003). It is important to distinguish “local food” from “locality food” or expensive special products that are marketed as products from a certain region or of certain traditional production mode, the customers of which may be very far from the site of production (Marsden et al. 2000). Locality food items are also produced in Kiuruvesi, but because of the price constraints, their use is not feasible within the public catering. Here “local” refers to basic food items needed in large quantities and produced within the Kiuruvesi region. These may be of organic or of conventional produce.

Implementing the strategy is not simply about substituting conventional products with local and organic food products. In order not to compromise the taste and the nutritional quality of the meals, implementation also necessitates careful menu planning. Expensive items like meat and fish are more seldom used. This partly compensates the often higher price of the local and organic food products and helps to keep the costs of the service within the budget. New recipes specifically for meals based on locally available raw materials have also been developed. The know-how of the actors of the Kiuruvesi catering is boosted by various training courses and by sharing their experiences in seminars and fairs organised by national organisations and authorities. The actors of the Kiuruvesi catering service also co-operate with research institutes. With continuous updating of the knowledge and know-how and with the position as the path-breakers in developing the local and organic food concept, the kitchen staff is motivated and satisfied (Risku-Norja 2015; Tikkanen 2014).

As a public actor, the Kiuruvesi municipality is constrained by the law of public procurements (Finlex 2007), which aims at securing equal opportunities for the suppliers. The law presumes that tender calls are put out for competitive bidding. It is fully possible to use “organic certification” as a purchasing criterion, but not to use “local”. In practice, both organic and conventional local products are favored by combining various quality attributes, using the concept “combined affordability” (MEAT, Association of Colleges 2015). A variety of attributes are used, e.g. packaging size and their recyclability, delivery times and frequency, freshness, various specific product attributes and nutritional requirements, and possibly organic production. In combined affordability, attention is paid to employment, entrepreneurial activity and benefits for the regional economy brought about by labour-intensive small-scale organic and local production. Finding the criteria requires, thus, considerable purchasing know-how, active interaction with the potential suppliers and familiarity with their products.

With the small population basis in Kiuruvesi, the volumes of the food items needed in the municipal catering are moderate. Therefore, the purchases remain often below the threshold value (at present 30,000 Euros¹ per purchase), and this allows purchasing without the

¹ The procurement law is presently being revised, and with the emphasis on genuinely short supply chains and on easing the use of local products, several changes to the regulations are anticipated.

necessity of full process of competitive bidding. For such items, it is sufficient to clarify the price range of the products in the market. In addition to the law on public procurements, the nutritional recommendations, food legislation and the legislation on municipal services form the normative basis. Naturally, the catering sector is also constrained by the municipal budget.

Over the years, the co-operation between the municipal catering sector and the producers and processors has improved the availability of suitable products. Product development has taken place to fulfill the needs of the municipal customers. With emergence of small-scale preprocessing at the production site and of new small enterprises, the repertoire of food items has gradually increased. Certain products and recipes designed specifically for the municipal food service have been invented as a result of co-production among the processors and actors of the catering sector. Co-operation has developed, especially via anticipatory dialogs that have been carried out between catering service managers and the potential suppliers before tender calls are put out (Risku-Norja 2015).

In Kiuruvesi, the food purchases comprise about 26 % of all costs of the catering sector, and the share of the local and organic food specifically is 6.6 %. The salaries comprise the largest cost item (53 %), the costs of the internal rent are about 12 %, and 9 % are unspecified costs). Until 2015, there were two central kitchens, one providing school meals and the other for the customers of health and social care. Local and organic food is especially emphasised in the school meals. The costs for local and organic food in schools comprise 43 % of the food purchases, and organic products alone comprise 14 %. In the entire municipality, the share of local and organic food is 23 %, but organic products comprise only 2 %. The shares vary from year to year depending on the availability (Risku-Norja 2015). Towards the end of 2015, the two central kitchens have been merged and the impact on the use of local and organic food items remains to be seen.

The proportion of the LOF items in Kiuruvesi is today about as high as it can be. The major bottleneck in increasing the proportion is the focus of the Finnish food sector on the economy of scale and the consequent concentration of the processing plants into few large units. Even though Kiuruvesi is in the midst of the main primary production areas of milk and beef, the great majority of the products are processed elsewhere. Therefore, the supply chains of the beef and milk products are

not short, and they are not considered as being of local origin. Because the economic situation in Kiuruvesi has for long been very difficult, the necessary investments in local processing of milk and meat have not been found. The option to involve the municipality in such investment is discussed, but has so far not led to action. In addition, because of the natural circumstances, many agricultural products cannot be produced in the region. Generation change in the enterprises may also present a threat. Some of the present suppliers are approaching retirement age. The younger generation is not always interested to take over, and in some cases the continuation of the activity is at stake.

In Kiuruvesi, the local and organic food concept is today widely accepted among the different political parties and the strategy itself is not questioned. It has brought about economic and social benefits in the form of supporting local economy and strengthening local food culture. It is considered as important especially in view of the regional economy. The actors point out also other positive impacts, such as care for the natural environment, decreasing packaging and bio-waste as well as improved eco-efficiency of water and energy use (Risku-Norja 2015; Tikkanen 2014).

In recent years, the interest in using local and organic food has increased among institutional customers both in Finland and in Europe in general. Being a pioneer in use of such products, Kiuruvesi is often referred to as example on good practices, and experiences from Kiuruvesi have been used in extension on sustainable public catering. Sharing knowledge with actors from other municipalities and from different countries is an important part of fostering the know-how and adaptive capacity among the actors and policymakers. As an expert by experience, the manager of the Kiuruvesi catering service has actively participated in national and even international seminars, informing about their strategies within public catering.

Use of organic products in public catering

As shown by the two examples presented here, Finnish professional kitchens still use only small proportions of organic raw materials. However, 13 % of the Finnish municipalities have made a strategic decision to raise the proportion of organic food in their catering. In the institutional kitchens, the use of organic products measured by weight by 2015 is 5 % (Pro Luomu 2015b). Vegetables and berries are more often organic in season

than off-season (Muukka 2008; Risku-Norja and Mikkola 2014). Different flakes, flours and bread are the most popular products. Organic raw materials are used especially in the day care centers (10 %), whereas within the elderly care, only 2 % of kitchens use them (Pro Luomu 2015b). In the wholesales of the HoReCa sector, the value of organic sales was about 0.6 % in 2013 (Pro Luomu 2015b).

The situation has changed slowly both regarding the overall use of organic products and the specific items that are used. In 2007, 371 out of 570 municipalities stated in a survey that they did not use organic products at all. 3.5 % used organic products daily, and 2.7 % weekly (Muukka et al. 2009). The organic food items used on the daily or weekly basis were milk, grain products and root vegetables. Seasonal use of organic products appeared, however, to be more common, as the remaining 30 % of the respondents reported to use organic food seasonally or by other frequency. Seasonally used products are vegetables and root vegetables. Organic products are occasionally used, if they are easily available from local producers. They are also used during specific weeks and days devoted to organic food. Organic meat and meat products are seldom used in municipal catering; the high price and problems in availability being the restrictive factors.

A few years later, the situation had not essentially changed. Organic products were occasionally used in only six out of the 116 responding municipalities (5 %). In one of the municipalities, organic products were clearly favoured, but 75 % of the municipalities reported not to use organic products at all (Risku-Norja and Mikkola 2014).

Caterers' experiences with local and organic food

In general, kitchen professionals appreciate local and local organic products and the possibility to buy them directly from the producers facilitates their use. Some kitchens use organic products seasonally, mostly because they are locally available and based on experience and because their quality is regarded as good (Muukka 2008; Risku-Norja and Mikkola 2014). The reasons to use organic products are traceability of the raw materials, improved food safety as perceived by the caterers and the overall sustainability strivings (Risku-Norja and Mikkola 2014). The quality of organic vegetables, potatoes and fruit is experienced as good or excellent (Muukka et al. 2009). At the start, the most important

reason to use organic products in the Steps to Organic day care centres was children's health and wellbeing; organic products with no residues of pesticides and less additives. The attitude of the children's parents was also positive, and part of the parents had chosen the day care center specifically because of the organic food. With the continued use, good taste of the products, ethical production and sustainability issues have become increasingly important in justifying the use of organic products. The desire to promote sustainability was also mentioned among the reasons to join the Steps to Organic training program (Risku-Norja and Mikkola 2014).

Organic products are usually purchased from retail or from special whole sales. Potatoes and other root vegetables, grain products and berries are also purchased directly from the producers. Contrary to conventional products, processing enterprises and normal wholesalers are seldom used as delivery channels for organic produce. When large quantities of products are needed, purchasing in retail is out of the question. Therefore, the availability problems are accentuated in large catering units, and organic food is easier to realise in small kitchens than in large ones.

The caterers point out several problems which hamper their possibilities to use organic products. One of the major obstacles is the purchasing price. The raw material costs of the meals have gone up by 10–25 % since the day care centres started to use organic products. There are, of course, differences between the product groups. Organic grain products are available also in large packages and the price difference between organic and conventional products is negligible, whereas, e.g. snacks in small packages may have premium prices up to fourfold (Muukka et al. 2009).

From the caterers' point of view the packaging size is important. For practical reasons, e.g. milk products are needed in large packages, because the small packaging size of organic products requires more work in the kitchens. This has led to that—except for the children's day care centres—instead of traditional milk; sour milk with a much smaller demand is the primarily used organic milk product in the municipal institutions. The small packaging size increases also significantly the price of the products (Muukka 2008; Muukka et al. 2009).

A further problem is related to the low degree of pre-processing of organic products. Ready-peeled potatoes, frozen vegetables, sliced bread or grated root vegetables are not regularly available. This means that a lot has to

be ordered in advance, which increases the costs of the catering services. Other obstacles include inadequate delivery channels and even failing reliability of the delivery. The choice of organic basic food items is small and the availability of products is not satisfactory, problems were experienced in all product groups. In general, the availability of organic meat and the choice of various organic milk products were perceived as especially meager (Ekocentria 2015a).

Discussion and conclusions

Institutional kitchens are constrained by regulations on public procurement, and it is a common belief that premium prices hamper the purchase of organic food in public catering. However, the regulations offer a possibility to prioritise other qualities than a cheap price, and they support a demand for organic food. In addition to the price-competitiveness, attributes such as taste, freshness, social, environmental and regional economic benefits as well as overall sustainability may be emphasised in tender calls (Finlex 2007; EU 2014; Association of Colleges 2015). The labour-intensive organic production may bring along economic benefits by creating work opportunities both within primary production and in processing (ME 2008; Food Strategy 2010; Finnish Government 2011). This has been shown to be economically beneficial also at a nation-wide level (Risku-Norja and Mäenpää 2007). Consequently, the price is not anymore the only factor to be accounted for in competitive bidding of the food purchases. Besides, price differences can be compensated by careful menu planning without compromising the nutritional quality, e.g. by substituting (some) meat with pulses.

Despite significant political support in Finland, we have shown here that organic food has not really found its way into the institutional kitchens yet. Even when determined measures are taken, expanding the use of organic food in professional kitchens appears to be a slow process. Although it is stated that sustainable choices should be attractive, easy and affordable (ME 2012), the caterers as well as the consumers are often confronted with the fact that organic products are neither easy nor affordable and there have also been quality problems. Over the past decade, several factors hampering the use of organic products have been repeatedly pointed out both in the policy documents and by the

caterers. In institutional kitchens, the problems crystallise into the availability of organic products suitable for the needs of the professional kitchens and into premium prices, both problems being accentuated with animal-based products. The choice of organic products is restricted, and furthermore, supply and demand do not meet. Packaging size and degree of pre-processing are often inappropriate, and this increases the workload in the kitchens. Availability is hampered also because the products cannot always be purchased via normal sourcing channels (OSWG 2006, Finnish Government 2010; Food Strategy 2010; Kottila 2011; Tahvonen 2010; ME 2012; MAF 2014). Similar hampering factors have been identified elsewhere in Europe (Løes and Nölting 2011), but the availability and delivery problems are accentuated in Finland, which is a sparsely populated country of long distances.

Organic producers are often SMEs and the volumes of their products in the markets are small. Therefore, the use of organic products is more common in rather small kitchens. The results of the long-lasting efforts to promote organic food within public catering services are fairly modest. The Steps to Organic training program has been running now for 13 years, and it is well known among the caterers (Muukka et al. 2009), but the use of organic products in public kitchens is still marginal. With the share of the order of 5 %, it is somewhat higher than in retail (1.6 %, MAF 2014). The Kiuruvesi municipality adopted the LOF strategy already at the end of the 1990s in order to revive local entrepreneurship in an economically difficult situation. The concept has shown to be workable. It has brought along new vigour to the food sector in the Kiuruvesi region, and it has fused faith also in the future of the sector's livelihood. One of the bottlenecks in increasing the share of local and organic food of the SME:s is the focus of the Finnish food sector on the economy of scale, and the consequent concentration of the processing plants into few large units. Another reason is the fairly northern location of the country, which very much restricts the repertoire of the agricultural products.

Finnish stakeholders want to utilise the growing interest in organic food abroad, and hence, the planned growth of the organic sector is justified by planned food exports. Within the organic sector, domesticity of organic food is not the major issue; focus is rather on the overall organic consumption. Although in the export-oriented approach little attention has been paid to domestic consumption, the most recent documents stress domesticity both in retail

and public catering (ME 2012; MAF 2014). Stressing domesticity does not, however, necessarily help the Finnish organic sector, because the appreciation of domestic conventional food as pure, safe and tasty has slowed down the demand of certified organic products (Food Culture 2008). This effect is accentuated by the fact that the policy documents emphasise sustainable food consumption, and organic, local, vegetarian or seasonal food are by definition considered to support sustainability strivings (ME 2009). In consequence, local and organic are often used in parallel and sustainability is given as an overall justification for both organic and local food. This has caused confusion among the consumers and even among the municipal decision-makers. The caterers, instead, are well aware of the difference and recognise that organic may or may not be local, and they often prefer local or domestic to organic.

A conscious strategy to develop the public catering sector and a firm knowledge on competitive bidding procedures is needed to accommodate the purchasing criteria within the concept of “combined affordability” (MEAT) in the tender calls. This requires thorough purchasing know-how. In Kiuruvesi, the procedure has been developed over the years towards regular negotiations among the head of the catering service and the potential SME suppliers before the tender calls are put out. The strong involvement of the producers and processors via the competitive bidding procedure and associated anticipatory dialogue and product development together with the catering staff is very important for the suppliers as a means of developing own product repertoire and own activities. For example, in Kiuruvesi, the mutual interplay features co-production, and the relationship between the entrepreneurs and municipal catering actors has developed towards strategic partnership. The municipality is a reliable, long-term customer and, after the contract has been signed, the entrepreneurs have secure income. With less time needed for marketing and for organising deliveries, they can focus on developing their core business activities. This is especially important for the SMEs. The reason is the distorted structure of the Finnish food sector, where over 80 % of the market is shared by two market leaders. Consequently, it is very difficult for the SMEs to get foothold in the market. Long-term customership with public catering is important, because it can provide a kind of protected space for the SMEs to develop the business and to enter the heavily competed food markets (Risku-Norja 2015).

There are several reasons for the slow growth in organic consumption in Finnish public catering. On the one hand, there is laxity in the policy aims. There are a lot of good intentions in the policy field, and the degree of freedom of the municipalities is only loosely constrained by the goals expressed in the policy documents. However, these articulated goals represent collective top-down approaches, the implementation of which is at the responsibility of the municipalities. On the other hand, the practical obstacles have not been addressed in the real-life context of the municipalities. In praxis, the municipalities are constrained by the competitive bidding of public purchases and by restricted economic resources.

With regard to competitive bidding, it is fully possible to require organic products, but it is useless to do so, unless the bottlenecks regarding availability and price have not been identified and opened. Therefore, same instructions cannot be offered as an overall solution, but challenges for increased organic consumption need to be addressed in the specific situations for each location and product. Par excellence, the choice of organic food is a political decision and it requires determined political will. The loose articulation in the policy documents leaves enough playroom for the municipalities to outline own food strategies, and the strategies need to be based on the best available knowledge. It is therefore important to pay attention to the research results dealing with environmental and human wellbeing, to interpret these in terms of own situation and use the results in strategy formulation. The outcome of the strategy will be enhanced, if the practical actors are involved in strategy planning (Mickwitz et al. 2011). This means that in developing the food sector, the caterers’ expertise regarding the recipes and nutritional requirements as well as to the customers’ experiences regarding the various quality aspects are accounted for. With the actor-oriented approach, attention is paid both to views and experiences of the catering professionals and to the needs of their customers. So far, there is little experience on such municipal food strategies, but the available evidence on local food shows that change is possible (e.g. Kakriainen and von Essen 2005; Tikkanen 2014; Risku-Norja 2015). It appears that adoption of organic food in public

catering is characterised by polycentrism at a local level instead of collective top-down action. In other words, the process starts and proceeds at different paces in several municipalities and gradually spreads from these focii. The vanguard municipalities have an important role as an example. The municipalities can learn from each others' experiences and innovations; sharing this knowledge can eventually influence also the common food policy formulation.

The lessons learned from Finland suggest that although national food policy provides a supporting frame to increase the use of organic food in public catering, the most important steps are taken at the local level. It requires first of all strategic decisions and strong and persistent commitment of local policymakers. Because the circumstances vary, the goals need to be defined in the municipal food strategy. This is to be formulated so as to address the specific needs of each municipality and by paying due attention to the experts by experience, i.e. the actors of the catering sector. Important ingredients are the role of path-breaking municipalities and exchange of experiences both nationally and internationally.

Secondly, there is a need of thorough knowledge on the purchasing procedures. The entrepreneurs need to be adequately informed about the institutional customer's needs and the (s)he needs to be familiar with the potential suppliers. Co-operation needs to be developed between the municipal purchaser and the suppliers, because well-functioning mutual communication is required in order to find the suitable criteria for the tender calls. Co-operation between the suppliers may be necessary in order to secure the availability of suitably pre-processed products in sufficient volumes for the needs of the institutional customers. Via division of labour among the suppliers, such co-operation may lead to more efficient use of resources and thus to an increasing professionalisation of the suppliers.

Both the purchaser and the suppliers need also to establish good contacts with national and/or regional extension services. These have the best up-to-date knowledge on the competitive bidding process and its interpretation.

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